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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/034,190
Filing Date: December 28, 2001
Appellant(s): DATTA ET AL.

John W. Ogilvie
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 17 May 2006 appealing from the Final Office action mailed 07 February 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

U.S. Pat. No. 6,665,702	**Zisapel et al**	**12-2003**
U.S. Pat. No. 6,779,039	**Bommareddy et al**	**08-2004**
U.S. Pat. No. 6,262,987	**Mogul**	**07-2001**
U.S. Pat. No. 6,502,131	**Vaid et al**	**12-2002**

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The analysis under 35 U.S.C. 112, first paragraph, requires that the scope of protection sought be supported by the specification disclosure. The pertinent inquiries include determining (1) whether the subject matter defined in the claims is described in the specification and (2) whether the specification disclosure as a whole is to enable one skilled in the art to make and use the claimed invention.

(1) Claims 1, 8 and 13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The "invention" for the purpose of the first paragraph analysis is defined by the claims. The description requirement is simply that the claimed subject matter must be described in the specification. The function of the description requirement is to ensure that the applicant had possession of the invention on the filing date of the application. The application need not describe the claim limitations exactly, but must be sufficiently clear for one of ordinary skill in the art to recognize that the applicant's invention encompasses the recited limitations. The description requirement is not met if the application does not expressly or inherently disclose the claimed invention.

Specification does not explicitly describe nor is sufficiently clear for one of ordinary skill in art to recognize the following negative limitation steps as recited in claims 1, 8 and 13:

- Selects an IP address from the data component based on information about the status of a path to the server, said information obtained at least in part by pinging a router on a path to the server to determine if the router is reliable connection component, **said IP address selection made without regard to the router's proximity to the server**, ... (see claim 1).

- Supplying the IP address of the router in a response to the resolution request **without regard to the router's proximity to the server**, thereby directing traffic to the server over a path through the router (see claim 8).
- Selecting an IP address **without regard to a connection component's proximity to the server** based on the connection component's status which is determined at least in part by pinging the connection component (see claim 13).

Therefore, claims 1, 8 and 13 are unclear that the one ordinarily skilled in the art cannot recognize the encompassed claimed limitations.

(2) Claims 1, 8 and 13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The enablement requirement necessitates a determination that the disclosure contains sufficient teaching regarding the subject matter claimed as to enable one skilled in the pertinent art to make and use the claimed invention. In essence, the scope of enablement provided to one ordinarily skilled in the art by the disclosure must be commensurate with the scope of protection sought by the claims.

Currently, the most prevalent standard for measuring sufficient enablement to meet the requirements of 112 is that of "undue experimentation". The test is whether, at the time of the invention, there was sufficient working procedure for one skilled in the art to practice the claimed invention without undue experimentation. It is important to note

that the test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue. A skilled artisan is given sufficient direction or guidance in the disclosure. Moreover, the experimentation required, in addition to not being undue, must not require ingenuity beyond that expect of one of ordinary skill in the art.

Undue experimentation and ingenuity would be required beyond one ordinarily skilled in the art to practice the following negative limitation steps as recited in claims 1, 8 and 13:

- Selects an IP address from the data component based on information about the status of a path to the server, said information obtained at least in part by pinging a router on a path to the server to determine if the router is reliable connection component, **said IP address selection made without regard to the router's proximity to the server**, ... (see claim 1).
- Supplying the IP address of the router in a response to the resolution request **without regard to the router's proximity to the server**, thereby directing traffic to the server over a path through the router (see claim 8).
- Selecting an IP address **without regard to a connection component's proximity to the server** based on the connection component's status which is determined at least in part by pinging the connection component (see claim 13).

Undue experimentation would be needed to select an IP address without regard to a connection component's proximity to the server.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-9, 12-16, 18-19 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Zisapel et al (Hereafter, Zisapel), U.S. Pat. No. 6,665,702 in view of Bommareddy et al (Hereafter, Bommareddy), U.S. Pat. No. 6,779,039.

Regarding claim 1, Zisapel teaches a connection-sensitive domain name resolution device, comprising:

a data component identifying IP addresses for at least two paths to a server which has a domain name (i.e., identifying IP addresses for at least two paths to each server) [see Figs. 3A-5] ; and

a code component which receives a domain name resolution request specifying the domain name, selects an IP address from the data component based on information about the status of a path to the server, and supplies the selected IP address in response to the domain name resolution request (i.e., selecting an IP address based on information about the status of a path to the server by implementation of load balancer for fail-over management and routing packets to the servers) [see Figs. 3A-5 and Col. 9, Lines 15-25 and Col. 17, Lines 6-67], said IP address selection made without regard to the router's proximity to the server (i.e., selecting IP address based upon F content function) [see Col. 17, Line 35 to Col. 18, Line 59].

Zisapel does not explicitly teach pinging a router on a path to the server to determine if the router is reliable connection component. However, Bommareddy, in the same field of load balancing and routing message traffic endeavor, discloses monitoring the health of routers by periodically sending a ping packet to router 114 to confirm that the flow is operative [see Bommareddy, Col. 7, Lines 40-62]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of pinging a router on a path to the server to determine if the router is reliable connection component in the system of router clustering disclosed by Bommareddy into the teaching of load-balancing with a connection-sensitive domain name resolution device disclosed by Zisapel in order to efficiently and actively monitor the health of the routers and/or connection paths to the server for detecting a failure and thus re-routing the traffic to the remaining operational router(s) [see Bommareddy, Col. 7, Lines 40-62].

Regarding claim 2, Zisapel further teaches the connection-sensitive domain name resolution device of claim 1, wherein IP addresses in the data component identify routers on paths to the server (i.e., IP addresses paths to the server), and the code component avoids selecting the IP address of a router that is on a path to the server but is not available (i.e., balancing the load among the three ISPs for incoming connections and in the event that the router indicated as first choice for connection is unavailable or overloaded, then a second choice router is used) [see Col. 17, Lines 6-17].

Regarding claim 3, Zisapel further teaches the connection-sensitive domain name resolution device of claim 1, wherein IP addresses in the data component identify routers on paths to the server (i.e., IP addresses paths to the server), and the code component selects the IP address in a round-robin manner by selecting the next IP address in a list of IP addresses of routers that are on paths to the server and are available when the selection is made (i.e., round-robin approach can be used by DNS to resolve IP addresses and in combination with a fail-over management scheme to select IP address and load balance requests across the ISPs) [see Col. 1, Lines 24-35 and Col. 17, Lines 6-17].

Regarding claim 4, Zisapel further teaches the connection-sensitive domain name resolution device of claim 1, wherein the code component selects the IP address of an under-loaded path, thereby tending to balance the loads on the paths to the server

(i.e., a fail-over management scheme recognizes when connection is unavailable or overloaded, then balancing the loads on another path to the server is carried out) [see Col. 17, Lines 6-17].

Regarding claim 5, Zisapel and Bommareddy do not explicitly teach the connection-sensitive domain name resolution device of claim 1, wherein the device is placed between the server and a router for the server. However, this is a matter of engineering choice to implement the placement of DNS in the network in such an arrangement that DNS is located between the server and router. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to alter the arrangement and locate the DNS elsewhere in the network while the DNS in combination with the fail-over management scheme still performing selection of IP address and load balance requests across the routers and ISPs to the servers [see Zisapel, Col. 9, Lines 14-25 and Col. 17, Lines 6-17].

Regarding claim 6, Zisapel further teaches the connection-sensitive domain name resolution device of claim 1, in combination with a router for the server, the router having multiple connections to the Internet (i.e., the Internet connection to the server through ISPs and routers) [see Abstract and Figs. 3B-5].

Regarding claim 7, Zisapel further the connection-sensitive domain name resolution device of claim 1, in combination with a server-sensitive domain name

resolver, wherein the combination performs load-balancing over server paths and also performs load-balancing over multiple servers [see Figs. 1A-5 and Col. 1, Lines 24-67 and Col. 9, Lines 14-25 and Col. 15, Line 57 to Col. 16, Line 15].

Claim 8 is rejected under the same rationale set forth above to claim 1.

Claim 9 is rejected under the same rationale set forth above to claim 2.

Claim 12 is rejected under the same rationale set forth above to claim 4.

Claim 13 is rejected under the same rationale set forth above to claim 1.

Regarding claim 14, Zisapel does not explicitly teach the configured medium of claim 13 wherein the selecting steps comprises determining whether each of lat least two routers in a connection responds to ping. However, Bommareddy, in the same field of load balancing and routing message traffic endeavor, discloses monitoring the health of routers by periodically sending a ping packet to router 114 to confirm that the flow is operative [see Bommareddy, Col. 7, Lines 40-62]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of pinging a router on a path to the server to determine if the router is reliable connection component in the system of router clustering disclosed by Bommareddy into the teaching of load-balancing with a connection-sensitive domain name resolution device disclosed by Zisapel in order to efficiently and actively monitor the health of the routers and/or connection paths to the server for detecting a failure and thus re-routing the traffic to the remaining operational router(s) [see Bommareddy, Col. 7, Lines 40-62].

Claim 15 is rejected under the same rationale set forth above to claim 3.

Claim 16 is rejected under the same rationale set forth above to claim 4.

Regarding claim 18, Zisapel further teaches the connection-sensitive domain name resolution device of claim 1 wherein the code component includes code for maintaining logs (i.e., status and statistics table) [see Col. 13, Lines 1-67].

Regarding claim 19, Zisapel further teaches the connection-sensitive domain name resolution device of claim 1 wherein the code component includes code for sending alerts to system administrators (i.e., administrative manager) [see Col. Col. 9, Line 58 to Col. 10, Line 29 and Col. 17, Line 35 to Col. 18, Line 59].

Regarding claim 21, Zisapel further teaches the connection-sensitive domain name resolution device of claim 1 wherein the device is configured for multi-homing (i.e., multi-homing environment) [see Col. 15, Line 53 to Col. 16, Line 3].

4. Claims 10 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Zisapel, U.S. Pat. No. 6,665,702 in view of Bommareddy et al (Hereafter, Bommareddy), U.S. Pat. No. 6,779,039 and further in view of Mogul, U.S. Pat. No. 6,262,987.

Regarding claim 10, Though Zisapel does suggest TTL in the process of polling and determining connection status [see Zisapel, Col. 3, Lines 23-54]. Zisapel and Bommareddy do not explicitly teach the method of claim 8, further comprising the step of adjusting the time-to-live to be associated with a DNS record for an IP address in a path to the server. However, Mogul, in the same field of Internet communication using DNS endeavor, discloses updating time-to-live (TTL) associated with the DNS record [see Mogul, Abstract and Col. 1, Line 35 – Col. 2, Line 10 and Col. 4, Lines 19-32 and Col. 6, Lines 10-50]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of setting a DNS record time-to-live (TTL) disclosed by Mogul into the teaching of load-balancing with a connection-sensitive domain name resolution device disclosed by Zisapel because it would have enabled the prevention of DNS cache miss due to TTL expiration which may result in a time-consuming reload [see Mogul, Col. 1, Line 35 – Col. 2, Line 10].

Claim 17 is rejected under the same rationale set forth above to claim 10.

5. Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Zisapel, U.S. Pat. No. 6,665,702 in view of Bommareddy et al (Hereafter, Bommareddy), U.S. Pat. No. 6,779,039 and further in view of Vaid et al (Hereafter, Vaid), U.S. Pat. No. 6,502,131.

Regarding claim 20, Zisapel and Bommareddy do not explicitly teach the connection-sensitive domain name resolution device of claim 1 wherein the code

component includes authentication and security code. However, Vaid, in the same field of Internet communication using DNS endeavor, discloses security services includes functions such as access control, authentication, authorization and encryption [see Vaid, Col. 25, Line 22 – Col. 26, Line 54]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of security services disclosed by Vaid into the teaching of load-balancing with a connection-sensitive domain name resolution device disclosed by Zisapel because it would have enabled to intelligent enforce policies and control network traffic in a more secure manner.

(10) Response to Argument

A. Introduction:

Zisapel et al, U.S. Pat. No. 6,665,702, Pub. Date of December 2003:

Zisapel discloses a method and system for managing a computer network connected to the Internet through a plurality of Internet Service Providers (ISPs) including receiving a DNS resolution query from a remote computer for a domain name within a computer network, sending polling requests through a plurality of ISPs from the computer network to the remote computer, and receiving replies from the remote computer corresponding to the polling requests, and measuring proximities of the remote computer to the computer network via the plurality of ISPs based on the replies [see Zisapel, Col. 9, Lines 15-25].

In addition, Zisapel further discloses the plurality of ISPs assigning respective IP addresses to the computer network and designating a source IP address for each polling request corresponding to the ISP through which the polling request is sent [see Zisapel, Col. 5, Lines 9-13].

Moreover, Zisapel further discloses a method and system for routing data from a first node to a second node via a network and including providing a plurality of available routes from the first node to the second node and selecting one of the routes for sending data between the first node and second node on the basis of content information of the data, and making decision on the path for routing the data packet from a first node to a second node based on a Decision Function wherein the Decision Function F.sub.content is defined as: F.sub.content = F(Hops weighting factor*Hops count factor; Response weighting factor*Response time factor; Path quality weighting factor*Path quality factor, Packet loss weighting factor*Packet loss factor) [see Zisapel, Col. 11, Lines 31-59].

Zisapel also teaches a connection-sensitive domain name resolution device, comprising a data component identifying IP addresses for at least two paths to a server which has a domain name. For example, Zisapel discloses identifying IP addresses for at least two paths to each server [see Zisapel, Figs. 3A-5]. In addition, Zisapel further teaches a code component which receives a domain name resolution request specifying the domain name, selects an IP address from the data component based on information about the status of a path to the server, and supplies the selected IP address in response to the domain name resolution request. For example, Zisapel discloses

selecting an IP address based on information about the status of a path to the server by implementation of load balancer for fail-over management and routing packets to the servers [see Zisapel, Figs. 3A-5 and Col. 9, Lines 15-25 and Col. 17, Lines 6-67], said IP address selection made without regard to the router's proximity to the server (i.e., selecting IP address based upon F content function) [see Zisapel, Col. 17, Line 35 to Col. 18, Line 59].

Bommareddy et al, U.S. Pat. No. 6,779,039, Pub. Date August 2004:

Bommareddy discloses a router clustering system connects two or more routers to one or more distinct Internet Service Providers (ISPs) in a high-availability arrangement. Typically, the two or more routers connect to a plurality of ISPs at a site so that an outage of one ISP does not affect connectivity and availability to the site. The router clustering system typically includes a plurality of clustering units for redundancy that avoids difficulties that arise with a single point of failure. For example, two clustering units may be used in an active-passive high-availability configuration [see Bommareddy, Col. 2, Lines 58-67].

In addition, Bommareddy further discloses the router clustering system detecting one or more of various failure conditions including: (1) failure of the router LAN interface and link, (2) failure of the router due to power outage, software malfunction, hardware malfunction, or other condition, and (3) failure of the router WAN interface and link. When the router clustering system detects a failure, traffic is automatically forwarded to the remaining operational router or routers. The router clustering system does not

require manual intervention at the server to bypass the failed router [see Bommareddy, Col. 3, Lines 22-31].

Moreover, Bommareddy further discloses that the router clustering system begins to monitor "health" of the routers. In some implementations, the router clustering system monitors router health using a configured polling interval and health check method [see Bommareddy, Col. 3, Lines 45-48]. For example, Bommareddy discloses monitoring the health of routers by periodically sending a ping packet to router 114 to confirm that the flow is operative and actively monitor the health of the routers and/or connection paths to the server for detecting a failure and thus re-routing the traffic to the remaining operational router(s) [see Bommareddy, Col. 7, Lines 40-62].

B. Issue I: Regarding 35 U.S.C. §112 first paragraph rejection of claims 1, 8 and 13, Pages 7-13 of the Appeal Brief is directed to rejection of these claims.

(a) Appellant argues that written description rejections (claims 1, 8, 13) are wrong as a matter of law and wrong on the facts.

Examiner respectfully disagrees. In the amendment filed on 15 October 2005, claims 1 & 8 &13 have been amended with negative limitation as follows:

"...said IP address selection made **without regard to the router's proximity to the server**..." (see claim 1).

"...**without regard to the router's proximity to the server**..." (see claim 8).

"...**without regard to a connection component's proximity to the server**..." (see claim 13).

Regarding negative limitation in claim, **MPEP 2173 (i)** states:

"Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff 'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. "

The amended phrase clearly recites **a negative limitation**. Indeed, the specification/disclosure must contain a full, clear and concise description of the claimed subject matter. In this case, the specification does not exclude "regard to the router's proximity to the server."

The specification of the instant application at page 10 lines 14-21 discloses the following description:

"...The IP address is selected based on the status of path elements, such as routers 108 and possibly also links 110, where the path element status is defined in terms of path characteristics such as the speed of the link, the load on a link, the hop count between the requester and the resolver, and/or fixed load distribution. Additional criteria may also be considered, such as a pre-defined criterion based on geographic location of the requester. The selection should be made, at a minimum, by selecting an

IP address for a path that is apparently (based on the data 114) currently available to carry packets..."

Indeed, the specification/disclosure clearly and explicitly describes "the IP address is selected based on the status of path element such as the speed of the link, the load on a link, the hop count and a pre-defined criterion based on geographic location of the requester." The specification of the instant application does not disclose a negative limitation "**without regard to the router's proximity to the server**" as amended in claims 1, 8 and 13.

(b) Appellant argues that enablement rejections (claims 1, 8, 13) are wrong as a matter of law and wrong on the facts.

Examiner respectfully disagrees. The enablement requirement necessitates a determination that the disclosure contains sufficient teaching regarding the subject matter claimed as to enable one skilled in the pertinent art to make and use the claimed invention. In essence, the scope of enablement provided to one ordinarily skilled in the art by the disclosure must be commensurate with the scope of protection sought by the claims.

Currently, the most prevalent standard for measuring sufficient enablement to meet the requirements of 112 is that of "undue experimentation." The test is whether, at the time of the invention, there was sufficient working procedure for one skilled in the art to practice the claimed invention without undue experimentation. It is important to note that the test of enablement is not whether any experimentation is necessary, but

whether, if experimentation is necessary, it is undue. A skilled artisan is given sufficient direction or guidance in the disclosure. Moreover, the experimentation required, in addition to not being undue, must not require ingenuity beyond that expect of one of ordinary skill in the art. Undue experimentation and ingenuity would be required beyond one ordinarily skilled in the art to practice the negative limitation "**without regard to the router's proximity to the server.**"

Again, the specification of the instant application at page 10 lines 14-21 discloses the following description:

"...The IP address is selected based on the status of path elements, such as routers 108 and possibly also links 110, where the path element status is defined in terms of path characteristics such as the speed of the link, the load on a link, the hop count between the requester and the resolver, and/or fixed load distribution. Additional criteria may also be considered, such as a pre-defined criterion based on geographic location of the requester. The selection should be made, at a minimum, by selecting an IP address for a path that is apparently (based on the data 114) currently available to carry packets..."

Indeed, the specification/disclosure clearly and explicitly describes "the IP address is selected based on the status of path element such as the speed of the link, the load on a link, the hop count and a pre-defined criterion based on geographic location of the requester." The specification of the instant application does not disclose a negative limitation "**without regard to the router's proximity to the server**" as amended in claims 1, 8 and 13.

Therefore, claims 1, 8 and 13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

C. Issue II: Regarding 35 U.S.C. §103(a) rejection of claims 1-9, 12-16, 18-19 and 21, Pages 13-16 of the Appeal Brief is directed to rejection of these claims.

Appellant argues that obviousness rejections (claims 1-9, 12-16, 18-19, 21) rely on an improper combination.

Examiner respectfully disagrees. *In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.* See ***In re Keller*, 642F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck* & Co., 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986)**.

Applicant obviously attacks references individually without taking into consideration based on the teaching of combinations of references as shown above. With respect to Bommareddy, appellant seems to argue points the examiner has already construed Zisapel does teach while restricting the arguments on the Zisapel-Bommareddy combined to arguments of no motivation.

In response to Appellant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make

the proposed combination of primary and secondary references. ***In re Nomiya*****, 184 USPQ 607 (CCPA 1975)**. *However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art.* ***In re McLaughlin*****, 170 USPQ 209 (CCPA 1971)**. *References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference.* ***In re Bozek*****, 163 USPQ 545 (CCPA) 1969.** *Every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein.* ***In re Bode*****, 193 USPQ 12 (CCPA 1977).**

In this case, the reason for combining reference Zisapel with Bommareddy is that it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of pinging a router on a path to the server to determine if the router is reliable connection component in the system of router clustering disclosed by Bommareddy into the teaching of load-balancing with a connection-sensitive domain name resolution device disclosed by Zisapel in order to efficiently and actively monitor the health of the routers and/or connection paths to the server for detecting a failure and thus re-routing the traffic to the remaining operational router(s) [see Bommareddy, Col. 7, Lines 40-62].

D. Issue III: Regarding 35 U.S.C. §103(a) rejection of claims 1-9, 12-16, 18-19 and 21, Pages 16-17 of the Appeal Brief is directed to rejection of these claims.

Appellant argues that the combination (cited against claims 1-9, 12-16, 18-19, 21) does not teach the claimed invention.

Examiner respectfully disagrees. Zisapel clearly teaches a connection-sensitive domain name resolution device, comprising a data component identifying IP addresses for at least two paths to a server which has a domain name. For example, Zisapel discloses identifying IP addresses for at least two paths to each server [see Figs. 3A-5].

In addition, Zisapel further teaches a code component which receives a domain name resolution request specifying the domain name, selects an IP address from the data component based on information about the status of a path to the server, and supplies the selected IP address in response to the domain name resolution request. For example, Zisapel discloses selecting an IP address based on information about the status of a path to the server by implementation of load balancer for fail-over management and routing packets to the servers [see Figs. 3A-5 and Col. 9, Lines 15-25 and Col. 17, Lines 6-67], said IP address selection made without regard to the router's proximity to the server (i.e., selecting IP address based upon F content function) [see Col. 17, Line 35 to Col. 18, Line 59].

Zisapel does not explicitly teach pinging a router on a path to the server to determine if the router is reliable connection component. However, Bommareddy, in the same field of load balancing and routing message traffic endeavor, discloses monitoring the health of routers by periodically sending a ping packet to router 114 to confirm that the flow is operative [see Bommareddy, Col. 7, Lines 40-62].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of pinging a router on a path to the server to determine if the router is reliable connection component in the system of router clustering disclosed by Bommareddy into the teaching of load-balancing with a connection-sensitive domain name resolution device disclosed by Zisapel in order to efficiently and actively monitor the health of the routers and/or connection paths to the server for detecting a failure and thus re-routing the traffic to the remaining operational router(s) [see Bommareddy, Col. 7, Lines 40-62].

The examiner believes that, based on the given facts, the combination of Zisapel and Bommareddy is proper. In summary, the references can and should be combined in the manner noted in the Rejection shown above. Dependent claims 2-7, 9-10, 12, 14-21 are rejected at least by virtue of their dependency on independent claims and by other reasons set forth above. Accordingly, claims 1-10 and 12-21 remain/stand rejected as shown above.

(11) Evident Appendix

(Empty)

(12) Related Proceeding Appendix

(None)

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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May 24, 2007

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